

## Office Memorandum • UNITED STATES GOVERNMENT

TO : OP-5301

DATE: 17 July 1953

FROM : OP-534

SUBJECT: VMF(N)-542 AAR ser 3-53 of 9 March 1953 with encl thereto; comments on

1. The statements made by Marine Corps personnel allege that the El Toro radio range was unreliable immediately prior to, during, and for a short period after the crash of WB-2, or at least certain irregularities in the operation of the radio range were allegedly experienced. These alleged irregularities were experienced by aircraft executing approaches on the El Toro radio range immediately before and after the crash of WB-2, but when this facility was flight checked later that same evening and the following day no such irregularities were detected.
2. The accident board states that no definite or specific reason can be given for this accident. However, little or no consideration appears to have been given to the pilots background of experience relative to instrument flying, the capabilities and limitations of ADF equipment, the vagaries and limitations of all LF/MF loop type radio ranges, and the study of local terrain.
3. This office concurs with the recommendations of the board in part. It is felt that the procedures being utilized locally at El Toro for the control of air traffic need immediate revision. Because of terrain and the alleged inadequate radio range facility, positive control of aircraft is a necessity at all times during periods of IFR; GCA pickup should be affected as far from the station as is practicable, e.g., one of the following intersections: Olinda, Huntington Beach, or San Pedro and at an altitude such that adequate clearance of all obstructions will be assured.
4. The statement "Due to the nature of the local terrain and medium power range station, which does not radiate enough signal strength for reliable ADF usage", which appears in the third paragraph of page 5 of the conclusions and recommendations of the board, is not a correct statement. Most publications, e.g., the Flight Information Manual, page 2, dealing with LF/MF loop type radio ranges facilities state emphatically that loop ranges are not suitable for DF and ADF operations for "constant bearing" work and instrument letdowns. DF or ADF should only be used with simultaneous type range stations and commercial broadcast stations. It should be noted that when utilizing this type facility and an ARN-6 or similar type receiver, the loop selector should be placed in the "antenna" or "loop" position when performing a radio range approach.

J L Guish

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FF13-5/PJK/ked  
A25-1

Ser 8472

6 APR 1953

3-9  
RESTRICTED  
SECURITY INFORMATION

THIRD ENDORSEMENT on VMF(N)-542 AAR ser 3-53 of 9 Mar 1953 concerning  
F3D-2 BuNo 125843

From: Commanding General, Aircraft, Fleet Marine Force, Pacific  
To: Chief of Naval Operations (Op-53)

Subj: Aircraft Accident Report, case of Captain Cameron A. MALLORY  
(b) (6) USMCR

1. Forwarded, concurring with the findings and recommendations of the Aircraft Accident Board.
2. A request to Chief of Naval Operations to increase the output of the El Toro Range has been submitted.
3. Negotiations are underway with Civil Aeronautics Administration to change the holding pattern at the El Toro Range.

*G. F. Schilt*

G. F. SCHILT

Copy to:  
BuAer (2)  
CG, FMFPac  
CO, MAG-15  
CO, VMF(N)-542

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RESTRICTED  
SECURITY INFORMATION

RESTRICTED  
SECURITY INFORMATION

FF14/MAG15/ARS:flw  
A25  
Serial 1057  
25 MAR 1953

SECOND ENDORSEMENT on VMF(N)-542 Aircraft Accident Report ser 3-53 of  
9 Mar 53

From: Commanding Officer, Marine Aircraft Group-15  
To: Chief of Naval Operations (Op-53)  
Via: Commanding General, Aircraft, Fleet Marine Force, Pacific  
Subj: Accident Report, case of Captain Cameron A MALLORY (b) (6)  
USICR

1. Forwarded concurring with the findings and recommendations of the Aircraft Accident Board.
2. The unreliability of the El Toro range indicates the necessity for a change in the letdown procedures and facilities for jet letdown to MCAS, El Toro.

*W K Pottinger*

W. K. POTTINGER

Copy to:  
CO, VMF(N)-542

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SECURITY INFORMATION

FF14/VMP(N)542

GCL: fwh

A24

Ser: 485

21 March 1953

FIRST ENDORSEMENT on VMP(N)542 Aircraft Accident Report ser 3-53  
of 9Mar53

From: Commanding Officer, Marine All Weather Fighter Squadron 542

To: Chief of Naval Operations (OP-53)

Via: (1) Commanding Officer, Marine Aircraft Group 15

(2) Commanding General, Aircraft, Fleet Marine Force, Pacific

Subj: Accident Report, case of Captain Cameron A. MALLORY (b) (6)  
USMC

1. Forwarded concurring with the findings and recommendations of the  
Aircraft Accident Board.

2. The Jet letdown and present GCA pattern has been found to be un-  
satisfactory on numerous occasions and changes are now under study.

*R. F. Flaherty*  
R. F. FLAHERTY

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OPNAV FORM-3750-1 (REV. 3-52)

THE AIRCRAFT ACCIDENT BOARD SHALL SUBMIT THIS REPORT TO THE C.O. OF THE ACTIVITY CONDUCTING THE INVESTIGATION. IT SHALL THEN BE FORWARDED BY THE C.O. IN ACCORDANCE WITH CURRENT AAR INSTRUCTIONS.

1. DATE OF ACCIDENT <b>9 March 1953</b>	2. ACTIVITY SUBMITTING REPORT <b>2144U VMP(N)542</b>	3. AAR SERIAL NO. <b>3-53</b>
4. MODEL, A/C <b>F3D-2 125843</b>	5. REPORTING CUSTODIAN OF A/C <b>VMP(N)542</b>	
6. NAME OF UNIT OPERATING THE A/C <b>VMP(N)542</b>	7. OPERATIONAL CHAIN OF COMMAND <b>NCAS, El Toro</b>	8. UNIT TO WHICH OPERATOR ATTACHED <b>MAO-15, AirFMPac</b>
9. LOCATION OF ACCIDENT <b>5 Miles North Santiago Reservoir</b>	10. NAME OF OPERATOR ATTACHED <b>VMP(N)542</b>	

11. PERSONNEL INVOLVED (Including name and injury code of those injured, not occupants of A/C)				
A. FULL NAME, RANK, SERVICE, TITLE NO. (List person in control first)	B	C. RILET	D. POSITION	E. INJURY
MALLORY, Cameron Augustus, Capt. (b) (6) USMC-R-A	31	Pilot	Left Seat	A
WOODARD, Frank Richard, Sgt. (b) (6) USMCSS	22	AIO	Right Seat	A

10. PILOT EXPERIENCE	TOTAL ALL MODELS	TOTAL THIS MODEL	LAST 12 MONTHS ALL MODELS	LAST 3 MONTHS ALL MODELS	LAST 3 MONTHS THIS MODEL	INSTRUMENT RATE
TOTAL HOURS	1436.3	23.5	179.6	66.1	23.5	Standard
INSTRUMENT HOURS			39.8	6.9	6.9	31
NIGHT HOURS			16.3	12.3	7.1	DATE DESIGNATED
CV LAND INGS	0	0	0	0	0	15 Dec 1943

11. CHECK IF <input checked="" type="checkbox"/> INCIDENT TO FLIGHT <input type="checkbox"/> NOT INCIDENT TO FLIGHT	12. PURPOSE OF FLIGHT <b>Fam, Target for AIA flight</b>	13. TIME IN FLIGHT <b>1.9</b>
14. TYPE OF ACCIDENT <b>Collision-Ground</b>	15. HANDOVER INVOLVED <b>B Jet Letdown to NCAS, El Toro</b>	
16. WEATHER <input type="checkbox"/> VFR <input checked="" type="checkbox"/> IFR <b>800 Feet 15 Miles</b>	17. DARKNESS <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	18. CLEARANCE ISSUED <b>VFR changed to IFR, airborne</b>
19. WIND DIRECTION <b>Level</b>	20. ANGLE OF IMPACT <b>Attitude on Impact</b>	21. DID FIRE FOLLOW IMPACT? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
22. AIRCRAFT AND ENGINE DATA (Fill in all data in every space of material failure or malfunction, actual or suspected)	23. STOPPING DISTANCE <b>30 Feet</b>	24. SPEED ON IMPACT <b>Unknown</b>

HISTORY	SERVICE TOUR	TOTAL NUMBER OF OVERHAULS	MONTHS IN THIS TOUR	FLT HOURS SINCE OVERHAUL	FLT HOURS SINCE ACCEPTANCE	TYPE OF CHECK LAST PERFORMED	FLT HOURS SINCE CHECK	NO. DAYS SINCE CHECK
AIRCRAFT	1	0	2	0	109.3	Intermediate	21.3	12
ENGINE X	MODEL ENG.			SERIAL ENG				
ENGINE 1	J34-WB36			025149 0	125.4	A	21.3	12
ENGINE 2	J34-WB36			025148 0	124.1	A	21.3	12

HAS THIS A/C BEEN DAMAGED IN PREVIOUS ACCIDENT(S) DURING PRESENT SERVICE TOUR? ☐ YES ☒ NO IF "YES", GIVE DATE(S) OF PREVIOUS ACCIDENT(S) **BUDN SERIAL NUMBER ON THIS ACCIDENT. IF SUBMITTED**

23. CONTRIBUTOR FACTORS (Check or fill in only one primary "P" factor, all others secondary "S")	24. CHECK CONTRIBUTION INVOLVED IN THIS ACCIDENT (List relevant)
<input type="checkbox"/> P <input type="checkbox"/> S PILOT (OR CREW) ERROR	<input type="checkbox"/> PITCHING OR ROLLING DECK
<input type="checkbox"/> P <input type="checkbox"/> S MATERIAL FAILURE OR MALFUNCTION	<input type="checkbox"/> COMMUNICATION DIFFICULTY
<input type="checkbox"/> P <input type="checkbox"/> S ERRORS OF OTHER PERSONNEL	<input type="checkbox"/> AIRPORT HAZARD
	<input type="checkbox"/> ROUGH SEAS
	<input checked="" type="checkbox"/> TERRAIN CONDITIONS

25. IMMEDIATE CAUSE(S)	26. PRECAUTIONARY LANDING	27. ENGINE FAILURE	28. FUEL EXHAUSTION OR OIL EXHAUSTION
<input type="checkbox"/> IMMEDIATE FORCES LANDING	<input type="checkbox"/> PRECAUTIONARY LANDING	<input type="checkbox"/> ENGINE FAILURE	<input type="checkbox"/> FUEL EXHAUSTION OR OIL EXHAUSTION

29. CHECK CONTRIBUTION INVOLVED IN THIS ACCIDENT (List relevant)	30. SAFETY BELT	31. EXPOSURE SUIT	32. G-SUIT	33. PROTECTIVE HEAVY EQUIP.	34. DYSEN EQUIP.
<input type="checkbox"/> X-WING, STACKWASH, SLIPSTREAM, TURBULENCE	<input checked="" type="checkbox"/> SHOULDER HARNESS	<input type="checkbox"/> EXPOSURE SUIT	<input type="checkbox"/> G-SUIT	<input checked="" type="checkbox"/> PROTECTIVE HEAVY EQUIP.	<input checked="" type="checkbox"/> DYSEN EQUIP.

35. MEDICAL OFFICER REPORT	36. SERIAL NUMBER
<b>Medical Officer Report</b>	<b>5-53</b>

37. ENCLOSURES AND DISTRIBUTION CHECK OFF LIST.	38. (b) (6)
CHECK ENCLOSURES	DISTRIBUTION BY COMMANDING OFF.

CHECK	ENCLOSURES	CHECK NO.	DISTRIBUTION BY COMMANDING OFF.
1	PILOT	X	ORIG. CNO (OP-53) VIA CHN. OF COM.
2	LOG	X	ICC DIRECT NAVASAPAC
3	ENG. CNO	X	BUAER DIRECT
4	PAR. CNO	X	CHECK AND LIST OTHERS AS REQUIRED
5	WITNESSES	X	2cc ComAirPac (Direct)
6	CUSTOMER	X	1cc CG, AirFMPac
7	PHOTOGRAPHS	X	1cc ANO, AirFMPac (Direct)
8	DRAWINGS	X	1cc CinCPacFlt
9	WEATHER REPORT	X	1cc CG, FMPac (Direct)
10	LOADING MANIFEST	X	1cc CO, NCAS, El Toro
		X	1cc CO, MAG-15

23 March 1953

(29) THE ACCIDENT

Four F3D-2 aircraft were scheduled on 9 March 1953 for night AIA flight. This flight was divided into two sections to work separately. Only two aircraft had radar in commission, WH-9 and WH-3. WH-2, Bureau Number 125843, pilot Captain Mallory, was to act as target for WH-9, pilot Major (b) (6). WH-16, pilot Captain (b) (6) was to act as target for WH-2, pilot, Major (b) (6). WH-2 took off at approximately 1950, followed shortly by the other aircraft. WH-9 and WH-2 conducted their intercept exercise at 20,000 feet in the local area.

At 2130 WH-9 and WH-2 reported to El Toro tower over Olinda intersection and requested a jet letdown and GCA. WH-9 was cleared number one to make the standard jet letdown. WH-9 was approximately over the range station, when WH-2, after a radio check with GCA, was cleared to commence a letdown. WH-2 reported departing 12,000 feet one minute south of Olinda and reported passing through each 2,000 feet. On reporting passing through 4,000 feet, El Toro tower instructed WH-2 to switch to channel #7 and to report to El Toro GCA at 2,500 feet over the range station. GCA was advised by the tower that WH-2 would be reporting in for an approach. No report was heard by GCA and after 30 to 60 seconds, GCA called WH-2 for a radio check. No report from WH-2 was ever heard by GCA. They informed El Toro tower of this fact and the tower commenced calling WH-2 on Channel #2. After about four calls, WH-2 answered. El Toro Tower requested a position report. WH-2 was heard to start to give his approximate position and then the transmission faded.

At approximately 2144 the pilot of WH-3 observed an explosion on the north end of the Santiago mountain range, approximately 12 miles NE of El Toro. WH-3 proceeded to the area and observed the glow of a fire through the overcast. This incident was reported to the El Toro tower. The position of the fire was determined by compass bearing from NC'S El Toro and the city of Corona. Also a ADF line of position was taken from El Toro radio range. The glow of the fire was still visible for approximately 20 minutes at which time WH-3 departed the area to start his jet letdown.

The following morning, 10 March 1953, the pilot of WH-3 returned to the area and repeated the bearing fix passed on the night before. The wreckage was sighted at about 0900. Air Sea Rescue aircraft and Marine Helicopters who were searching the general area were dispatched to the scene immediately. The aircraft was totally demolished. There were no survivors.

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(30) DAMAGE TO AIRCRAFT

The aircraft was completely demolished. Pieces of the wreckage were generally confined a radius of 500 yards from the point of impact. Some small pieces of the aircraft were found on the opposite side of the ridge line from the point of impact, a distance of approximately 1500 yards. Parts of the radar antenna were found buried four feet in the ground at the point of impact.

(31) THE INVESTIGATION

Statements from personnel showed that WH-2 checked in with GCA Olinda Intersection on VHF Channel 7 at 2130. Radio check was loud and clear by both parties. Following this WH-2 returned to Channel 2 and was cleared by El Toro tower to descend inbound to the range station and maintain 2,500 feet. WH-2 reported reaching 4,000 feet and was instructed to switch to Channel 7 for GCA. The GCA unit never received any transmissions from WH-2 on Channel 7 so after several attempts to contact WH-2 at 2142, approximately two and one half minutes after they had instructed him to switch to Channel 7 for GCA. WH-2's transmission after recontact was loud and clear but faded rapidly. Attempts to read location of WH-2 was unreadable.

At approximately 2144, WH-3 reported a bright flash through the overcast near the north end of Santiago peak. No further contact was established with WH-2.

WH-2 was found the next morning at approximately 33° 50' N-117° 40' W. The aircraft and bodies were demolished. Wreckage was found on the opposite side of the ridge line from the point of impact. A line from the point of impact to the wreckage on the opposite side of the ridge indicated that the direction of flight before impact was approximately 130° magnetic.

Further statements from GCA personnel indicated that the preceding aircraft, WH-9 had approached El Toro by GCA control. During the range descent, GCA had observed WH-9 to be 5 miles east of the range leg. Vectors by GCA corrected WH-9 into the pattern. A statement by the pilot WH-9 showed that he was receiving a "on course" signal at the above mentioned time.

Later WH-16 approached El Toro under the same conditions and after landing told the tower that he considered El Toro Range unreliable, in that a final heading of 210°M was required to proceed inbound on the 160°M North leg. Further investigation showed that El Toro GCA had a small target indications during the time WH-2 was attempting his approach, however, the target was on a bearing of 055° Magnetic, distance 6 miles, and was tracked for 5 antenna rotations to be on a 160° magnetic heading. No other radar targets were seen during WH-2's attempted approach.

(31) THE INVESTIGATION (Cont'd)

All pilots flying in the local El Toro area during the night of 9 March 1953, have reported that the ADF on the El Toro Range was extremely erratic. One pilot report that the needle fluctuated 90 degrees very rapidly and generally tended to point towards the 5696 foot peak of Santiago Mountain.

(32) THE ANALYSIS

(a) No personnel errors, which may have contributed to this crash, can be assigned. The pilot was definitely off of the established geographic location of the radio leg at the time of the crash and at an unsafe altitude. A very competent pilot immediately preceeded WH-2 into the GCA pattern following approximately the same instructions. This pilot states that he used the "antenna" position of the ARN-6 equipment during the approach and flew inbound on the beam. GCA tracked this pilot on their scopes and saw that he was approximately 5 miles East of the normal beam approach path. This indicated that the beam was distorted from its normal track. This fact is confirmed by another qualified pilot who was cleared to GCA immediately after the accident. This pilot claimed a final heading of 210° Magnetic to reach the station on a beam which normally requires 160° degrees Magnetic for inbound courses.

A play-back of available tape recordings gave no indication that the pilot was overly concerned about his location at any time. The final radio transmission faded after the first word "approximately" but there was no signs of anxiety in the transmission.

Pilot dis-orientation and an attempt to fly below minimum VFR conditions cannot be overlooked but the area of the accident, the heading and altitude of the aircraft would not afford any ground reference lighting to the pilot. In addition all previous training recieved by this pilot, discounts this possibility. Also the pilot may have been making the approach using ADF pointers indications only and became confused due to the erratic bearings experienced by pilots during this period. These are possibilities but none can be definately assigned.

(b) No material failures can be found. The aircraft was damaged to the extent material failure, if occurring, could not be ascertained. The radio range, a medium/power loop system, was flight checked later that evening and on the following day and no unsatisfactory conditions existed. The established fact that the range leg was disoriented at the time of the accident cannot be explained by any abnormal occurrences in the local area.

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### (33) CONCLUSIONS AND RECOMMENDATIONS

It is the conclusion of this board that no definite and specific reason can be given for this accident. A contributing factor could have been the distortion reported on the north course of the radio range station but no cause for this distortion could be found and the distortion was only in evidence for a relatively short period of time.

This board recommends that aircraft making jet penetrations to this field be placed under control of GCA immediately after receiving Olinda departure instructions from the tower. This would allow the pilot to make letdown reports to GCA and would not necessitate a change of radio frequencies at a critical point in the approach. The present procedure places the plane less than one minute from the station at the time he is required to switch to the GCA Channelization. Due to the nature of the local terrain and medium power range station, which does not radiate enough signal strength for reliable ADF usage, it is our conviction that the above recommendation is sound. In the event that the recommendation cannot be adapted due to tower control requirements it is recommended that the emergency instructions for air-ground radio failure be given the pilot prior to his penetration by the ground controlling station.

In addition the present holding and letdown procedure does not afford the pilot the opportunity of flying inbound on the letdown leg of the radio station until his final penetration. The board therefore recommends that the holding pattern be changed so that the pilot holds on the El Toro radio range between the station and the Olinda intersection. This would not effect the final penetration from Olinda but would give the pilot prior notification of any range leg distortions.

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On the night of 9 March 1953, I flew an aircraft intercept flight, using WH-2, piloted by Captain Cameron A. Mallory, as target. Upon the completion of our intercept work I directed Captain Mallory to report to El Toro tower over Olinda Intersection for descent instructions and GCA. I reported enroute to Olinda, was cleared for descent and GCA at approximately 2130. I approached Olinda on the north leg of the El Toro range on a heading of 340 degrees, receiving the "on-course" signal at all times. I was cleared for descent and made a 90-270 degree turn to the right and at a point one minute south of Olinda began my letdown, 4,000 feet per minute, speed 240 knots, heading 160 degrees, "on course" signal at all times.

Because of unusually excessive disturbances on all range and homing stations, I requested my radar operator, Master Sergeant (b) (6) to check my position by racon beacon. He reported the beacon to be ten degrees to our port. After completing my letdown, GCA directed me to a heading of 190 degrees and then back to 160 degrees. To the best of my knowledge these instructions were issued immediately after I had passed over the El Toro range station on a heading of 160 degrees. The remainder of the flight was occupied by a normal GCA and landing.

(b) (6)

206810

On the night of 9 March 1953, I was on a scheduled hop flying as target for another F3D-2. At approximately 2130, I was notified that MCAS, El Toro was on instruments and to proceed to Olinda intersection for GCA sequence. At the time of arrival at Olinda, I heard MCAS, El Toro clear one F3D to a GCA frequency and clear another F3D to descend on a standard jet letdown from Olinda to the El Toro range station, to report leaving every even thousands of feet and to report at 2,500 feet over the range station. I recognized the voice in the cleared F3D as Captain Mallory and heard him report passing through 10,000, 8,000, 6,000 and 4,000 feet. The transmissions between Captain Mallory and the tower after his report at 4,000 feet, I'm not sure of the accuracy of, however, the tower cleared the F3D to Channel 8 for GCA and the next transmission I think I heard was "This is WH-2 passing through 2,000".

Major (b) (6), who was flying in WH-3 called the tower at that time and reported an explosion north and east of the base which later proved to be WH-2.

(b) (5)

After it was determined that Captain Mallory had crashed or had proceeded to an alternate due to radio failure, I was cleared to descend to 12,000 from 30,000 feet. At this time, I was VFR over Olinda and knew my exact position. My range receiver was tuned in to the El Toro range and the gain turned down to cut out the signal until I needed it for a letdown. Upon reaching 12,000 feet, I was then cleared for an approach to the range station. Upon turning up the gain, I should have received an on-course signal, but instead received an "I" with very little bi-signal. I remarked to TSgt. (b) (6), who was flying as RO for me, that something was wrong and proceeded on a heading of 260° magnetic to the town of Brea, California before receiving a on-course signal. I turned to 160° degrees at that time and slipped off the beam to the west, then receiving an "A" signal. My flying was somewhat erratic from that time on until reaching the Radio station, in order to maintain an on-course signal. When passing over the cone, my magnetic heading was 210°. After passing the range station I turned to 160° for a GCA approach.

(b) (6)

206811

Between the times of 2130 and 2142, WH-2 was turned over to G.C.A. by the El Toro tower at 12,000 feet over the Olinda intersection for a radio check; at which time both the director and the aircraft heard each other loud and clear on channel seven. WH-2, was then turned over to tower frequency (channel 2), for a controlled letdown to the El Toro range. When reaching 4,000 feet, WH-2 was again turned over to G.C.A. to start his approach, (tower advised by intercom). When no transmission was received from 30 to 60 seconds from WH-2, I gave him a radio check which was not acknowledged. After three or four more radio checks which apparently WH-2 did not receive, I notified the tower we had not established radio contact.

While looking for the aircraft (WH-2), which may be lost, I received a target on my scope at approximately 055 degrees, at a range of about 6 miles. The target which was on the scope only about five sweeps of the antenna appeared to be on a course of 160 degrees. It was then some type of interference that blocked out the target. When the scope was clear again, we did not observe any targets in that vicinity.

(b) (6)

206812

RESTRICTED



RESTRICTED

STATEMENT OF STAFF SERGEANT [REDACTED]

(b) (6) USMC

On the night of 9 March 1953 at about 2125 El Toro Tower advised G.C.A. of a jet holding over Olinda intersection at 12,000 feet. At 2130 G.C.A. established radio contact with WH-9. The weather at El Toro was reported estimated 800 foot overcast, 15 miles visibility, with calm winds. After establishing radio contact with WH-9, he was switched to channel #2 for further instructions. El Toro Tower descended WH-9 to 4000 feet on the north leg of the El Toro range. When WH-9 was turned over to G.C.A. on channel #8, G.C.A. established radio contact and received a position report. I could see no aircraft on the scope in the vicinity of his reported position. I noticed a target at about 4 miles from the field bearing 335 degrees on a heading of 160 degrees. I gave WH-9 a right turn to a heading of 210 degrees. The target turned to the heading of 210 degrees. I let it go that course for about 6 miles, then turned the aircraft left to 160 degrees. When I turned the aircraft on the heading of 160 degrees, he was about 1 mile Southeast of the El Toro range station. A normal approach was continued.

(b) (6)

SSGT.

USMC

206813

U. S. MARINE CORPS AIR STATION  
EL TORO (SANTA ANA) CALIFORNIA

CONTROL TOWER CRASH REPORT

DATE 9 Mar 1953 TIME 2144 RECEIVER TRACK \_\_\_\_\_  
TYPE AIRCRAFT F3D-2 BUONO 125843 MODEX (OR SQUADRON) WH-2  
PILOT'S NAME Capt. Mallory TYPE ACCIDENT Lost Aircraft  
CRASH PHONE PULLED BY \_\_\_\_\_ CRASH CREW DISPATCHED: YES  
LOCATION <sup>ON</sup> STATION North End of Santiago Peak  
FIELD CONDITION: <sup>IFR</sup> WIND DIRECTION 020 VELOCITY 4K  
RUNWAY IN USE 34R FIELD CLOSED: YES OPENED AT \_\_\_\_\_  
SQUADRON CONCERNED NOTIFIED AT 2150 BY Sgt. (b) (6)

REMARKS:

On the above mentioned date, WH-2 was cleared to make an approach from the Olinda intersection. The approach was made successfully to 4000 feet and at that altitude the a/c was instructed to change to GCA channel 7 for completion of his approach to the El Toro Airfield.

GCA failed to establish radio contact with the a/c and notified tower of same. The tower called WH-2 on channel 2 VHF and established contact and asked for a position. WH-2 replied, but the transmission was unreadable and he was asked to say again. WH-2 started a transmission in reply, but the transmission was broken off and no further transmissions were heard from the a/c.

The tower gave several calls for WH-2, but they were unsuccessful.

At approximately 2144 WH-3 reported a bright flash through the overcast near the north end of Santiago peak. WH-3 then tried to ascertain the position of the supposed crash by giving the tower bearings from over the crash area.

The squadron concerned and the duty officer in the Station Operations Department were notified.

(b) (6)

(b) (6)

MSGT USMC

205814

STATEMENT OF CORPORAL (b) (6)

USMC

While operating "A" stand (mike position) on the night of 9 May 1953, weather reported eight hundred (800) feet overcast, visibility eight (8) miles with haze, WH-2 called for a jet letdown from the Olinda intersection for GCA. WH-2 was instructed to contact GCA for a radio check on Channel Seven VHF, after contact had been established, WH-2 reported back to the Tower for his letdown. WH-2 started his letdown from one minute south of the Olinda intersection at 12,000 feet, reporting even thousand feet. At 4,000 ft., I instructed WH-2 to contact GCA on Channel Seven. Shortly after GCA reported that they had not established contact with WH-2 and several calls were put out for him on VHF Channel Two. At approximately 2142, the Tower contacted WH-2, but WH-2's transmission faded out after what sounded like "WH-2 approaching."

At approximately 2144, WH-3 who was in the vicinity of the Olinda intersection, reported what appeared to be an explosion through the overcast, on the north side of Santiago Peak. WH-3 took three bearings on the position where the explosion appeared to be, one from El Toro Air Station, one from NZJ, and one from the town of Corona. WH-2 was never contacted again after approximately 2142.

Later in the evening, GCA advised us that the first aircraft, WH-9, was five miles to the east of where he should have been when turned over to them at 4,000 feet, and WH-16 advised the tower, after landing, not to use the Olinda letdown anymore that evening as the north leg of NZJ was unusually unreliable.

(b) (6)

206815



AEROLOGICAL OFFICE  
U. S. MARINE CORPS AIR STATION  
EL TORO (SANTA ANA), CALIFORNIA

CRASH REPORT

DATE 9 March 1953

TIME 2145 PST

The following weather observation was taken immediately following the crash of the designated aircraft.

PILOT MALLORY, C. A. RANK Captain ORGAN. WV(N)542

Type of Plane F3D-2 Bu.No. 125843

Place of Crash Santiago Peak

Number of Planes Involved One

Sky(Weather) Estimated 800 foot overcast 15 Miles

Ceiling Estimated 800feet Visibility 15 Miles

Cloud Amount: High \_\_\_\_\_ Middle \_\_\_\_\_ Low 10

Dry Bulb Temp 52.0 °F Wet Bulb Temp 48.5 °F

Dew Point 45 °F Relative Humidity 78 %

Wind Direction 020 degrees true Wind Velocity 4 Knots

Gusts at time of crash none Knots

Highest gust past 15 minutes none Knots

Altimeter Setting 004 Inches Pressure (Sea Level) 1017.7 Mbs

State of Landing Area \_\_\_\_\_

REMARKS: Weather past 30 minutes, i. e. Ling-Rain-Fog-Smoke-Thunder-etc.

(b) (6)

(b) (6)

Observer

Col.

Rank

208816



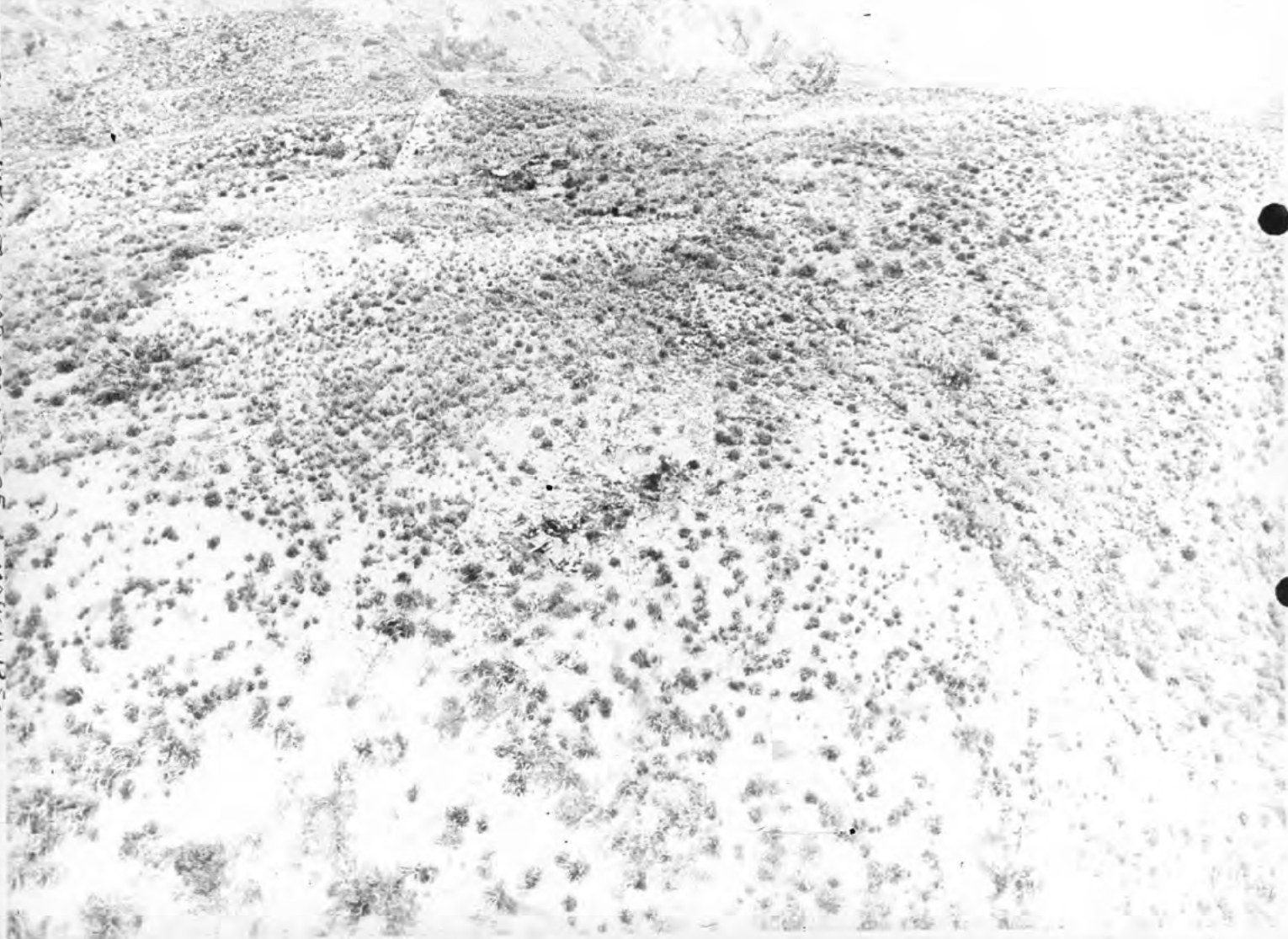
ENCLOSURE PLANT MATERIAL AND SOILS OF PLANT 100



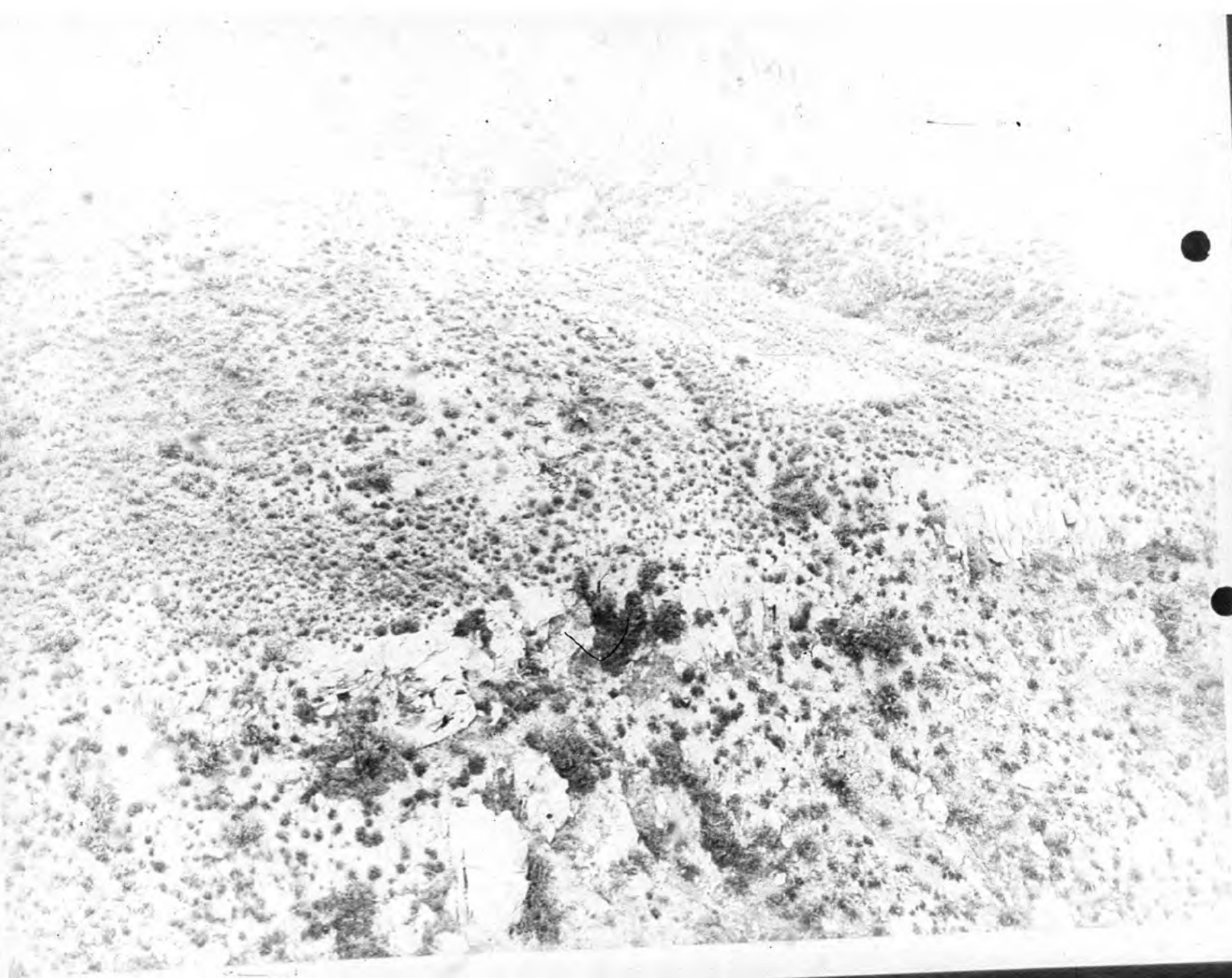
ENCLOSURE 86 TO JAF(N). 21 APR 50 2-2-50  
RECALL OF JAF(N) 1 MARCH 1953



ENCLOSURE 8c TO VME(N)54 AAR SEC 3-53 OF 1 MARCH 1953  
IMPACT POINT AND DECEASE



ENCLOSURE #4 TO VME (M) 592 AAR 503 3-50 OF 4 MARKS  
IMPACT POINT





ENCLOSURE XC TO VMF(N)542 AAR SCV 3-53  
BURNED FUELAGE SE (N) ? MARCH 1953



ENCLOSURE 8 f TO VMF(N)54 - AAR 307 3-53 OF 9 MARCH 1953  
BURNED WING FUSelage SECTION

